IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Janakiraman et al.**	§	
	§	Group Art Unit: **2626**
Serial No. **10/721,431**	§	
	§	Examiner: **Azad, Abul K.**
Filed: **November 25, 2003**	§	
	§	
For: **Method and Apparatus to Transliterate Text Using a Portable Device**	§	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

35525
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

APPEAL BRIEF (37 C.F.R. 41.37)

This brief is in furtherance of the Notice of Appeal, filed in this case on February 12, 2007.

A fee of $500.00 is required for filing an Appeal Brief. Please charge this fee to IBM Corporation Deposit Account No. 09-0447. No additional fees are believed to be necessary. If, however, any additional fees are required, I authorize the Commissioner to charge these fees, which may be required to IBM Corporation Deposit Account No. 09-0447. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

REAL PARTY IN INTEREST

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

RELATED APPEALS AND INTERFERENCES

With respect to other appeals or interferences that will directly affect, or will be directly affected by, or have a bearing on the Board's decision in the pending appeal, there are no such appeals or interferences.

STATUS OF CLAIMS

A. TOTAL NUMBER OF CLAIMS IN APPLICATION

Claims in the application are: 1-21.

B. STATUS OF ALL THE CLAIMS IN APPLICATION

1. Claims canceled: None.
2. Claims withdrawn from consideration but not canceled: None.
3. Claims pending: 1-21.
4. Claims allowed: None.
5. Claims rejected: 1-21.
6. Claims objected to: None.

C. CLAIMS ON APPEAL

The claims on appeal are: 1-21.

STATUS OF AMENDMENTS

No amendments were filed after the Final Office Action dated January 03, 2007.

SUMMARY OF CLAIMED SUBJECT MATTER

A. CLAIM 1 - INDEPENDENT

The subject matter of claim 1 is directed to a method in a portable device for transliterating text. The method includes generating an image of the text using a camera function in the portable device (Specification, p. 14, ll. 26-28; Figure 5, ref. no. 502); sending the image with an identification of a source language and a target language to a transliteration service (Specification, p. 15, ll. 3-6; Figure 5, ref. nos. 508 and 510) using a wireless communications link (Specification, p. 13, ll. 11-14); receiving a response from the transliteration service (Specification, p. 15, ll. 27-30; Figure 5, ref. no. 520), wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language (Specification, p. 15, ll. 19-26); and presenting the transliteration (Specification, p. 16, ll. 7-9; Figure 5, ref. no. 504).

B. CLAIM 3 - DEPENDENT

The subject matter of claim 3 is directed to the method of claim 1, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service (Specification, p. 19, ll. 18-21; figure 8, ref. no. 810).

C. CLAIM 7 - INDEPENDENT

The subject matter of claim 7 is directed to a method in a data processing system for transliterating text from a source language to a target language. The method includes receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language (Specification, p. 19, ll. 9-12; Figure 8, ref. nos. 800 and 802); performing optical character recognition on the image to generate the text (Specification, p. 19, ll. 12-13; Figure 8, ref. no. 804); transliterating the text from the source language to the target language to form transliterated text (Specification, p. 19, ll. 14-16; Figure 8, ref. no. 806), wherein the transliterated text contains a phonetic

pronunciation of the text from the source language using characters in the target language (Specification, p. 15, ll. 19-26); and sending the transliterated text to the portable device (Specification, p. 19, ll. 23-26; Figure 8, ref. no. 814).

D. CLAIM 8 - INDEPENDENT

The subject matter of claim 8 is directed to a data processing system in a portable device for transliterating text. The data processing system including generating means for generating an image of the text using a camera function in the portable device (Specification, p. 14, ll. 26-28; Figure 5, ref. no. 502); sending means for sending the image with an identification of a source language and a target language to a transliteration service (Specification, p. 15, ll. 3-6; Figure 5, ref. nos. 508 and 510) using a wireless communications link (Specification, p. 13, ll. 11-14); receiving means for receiving a response from the transliteration service (Specification, p. 15, ll. 27-30; Figure 5, ref. no. 520), wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language (Specification, p. 15, ll. 19-26); and presenting means for presenting the transliteration (Specification, p. 16, ll. 7-9; Figure 5, ref. no. 504).

E. CLAIM 10 - DEPENDENT

The subject matter of claim 10 is directed to the data processing system of claim 8, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service (Specification, p. 19, ll. 18-21; Figure 8, ref. no. 810).

F. CLAIM 13 - INDEPENDENT

The subject matter of claim 13 is directed to a data processing system for transliterating text from a source language to a source language. The data processing system including receiving means for receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language (Specification, p. 19, ll. 9-12; Figure 8, ref. nos. 800 and 802); performing means for

performing optical character recognition on the image to generate the text (Specification, p. 19, ll. 12-13; Figure 8, ref. no. 804); translating means for transliterating the text from the source language to the target language to form transliterated text (Specification, p. 19, ll. 14-16; Figure 8, ref. no. 806); and sending means for sending the transliterated text to the portable device (Specification, p. 19, ll. 23-26; Figure 8, ref. no. 814).

G. CLAIM 14 - INDEPENDENT

The subject matter of claim 14 is directed to a computer program product in a computer readable medium in a portable device for transliterating text. The computer program product including first instructions for generating an image of the text using a camera function in the portable device (Specification, p. 14, ll. 26-28; Figure 5, ref. no. 502); second instructions for sending the image with an identification of a source language and a target language to a transliteration service (Specification, p. 15, ll. 3-6; Figure 5, ref. nos. 508 and 510) using a wireless communications link (Specification, p. 13, ll. 11-14); third instructions for receiving a response from the transliteration service (Specification, p. 15, ll. 27-30; Figure 5, ref. no. 520), wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language (Specification, p. 15, ll. 19-26); and fourth instructions for presenting the transliteration (Specification, p. 16, ll. 7-9; Figure 5, ref. no. 504).

H. CLAIM 16 - DEPENDENT

The subject matter of claim 16 is directed to the computer program product of claim 14, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service (Specification, p. 19, ll. 18-21; Figure 8, ref. no. 810).

I. CLAIM 19 - INDEPENDENT

The subject matter of claim 19 is directed to a computer program product in a computer readable medium for transliterating text from a source language to a source language. The computer program product including first instructions for receiving a request from a portable

device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language (Specification, p. 19, ll. 9-12; Figure 8, ref. nos. 800 and 802); second instructions for performing optical character recognition on the image to generate the text (Specification, p. 19, ll. 12-13; Figure 8, ref. no. 804); third instructions for transliterating the text from the source language to the target language to form translated text (Specification, p. 19, ll. 14-16; Figure 8, ref. no. 806), wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language (Specification, p. 15, ll. 19-26); and fourth instructions for sending the transliterated text to the portable device (Specification, p. 19, ll. 23-26; Figure 8, ref. no. 814).

J. CLAIM 20 - INDEPENDENT

The subject matter of claim 20 is directed to a portable device including a bus system (Specification, p. 9, ll. 1-3; Figure 2, ref. no. 202); a memory connected to the bus system (Specification p. 9, ll. 3-6; Figure 2, ref. no. 206), wherein the memory includes a set of instructions; and a processing unit connected to the bus system (Specification p. 9, ll. 3-6; Figure 2, ref. no. 204), wherein the processing unit executes the set of instructions to generate an image of the text using a camera function in the portable device (Specification, p. 14, ll. 26-28; Figure 5, ref. no. 502); send the image with an identification of a source language and a target language to a transliteration service (Specification, p. 15, ll. 3-6; Figure 5, ref. nos. 508 and 510) using a wireless communications link (Specification, p. 13, ll. 11-14); receive a response from the transliteration service (Specification, p. 15, ll. 27-30; Figure 5, ref. no. 520), wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language (Specification, p. 15, ll. 19-26); and present the transliteration (Specification, p. 16, ll. 7-9; Figure 5, ref. no. 504).

K. CLAIM 21 - INDEPENDENT

The subject matter of claim 21 is directed to a data processing system including a bus system (Specification, p. 11, ll. 13-16; Figure 4, ref. no. 406); a memory connected to the bus system (Specification, p. 11, ll. 16-19; Figure 4, ref. no. 409), wherein the memory includes a set

of instructions; and a processing unit connected to the bus system (Specification, p. 11, ll. 13-16; Figure 4, ref. no. 402, 404), wherein the processing unit executes the set of instructions to receive a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language (Specification, p. 19, ll. 9-12; Figure 8, ref. nos. 800 and 802); perform optical character recognition on the image to generate the text; transliterate the text from a source language to a target language to form transliterated text (Specification, p. 19, ll. 12-13; Figure 8, ref. no. 804) wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language (Specification, p. 15, ll. 19-26); and send the transliterated text to the portable device (Specification, p. 19, ll. 23-26; Figure 8, ref. no. 814).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to review on appeal are as follows:

A. GROUND OF REJECTION 1 (Claims 15-28)

Whether claims 1-21 are anticipated by *Waibel*, Portable Object Identification and Translation System, U.S. Patent Application Publication 2003/0164819 (September 4, 2003) (hereinafter, "*Waibel*"), under 35 U.S.C. § 102(e).

B. GROUND OF REJECTION 1 (Claims 15-28)

Whether claims 3, 10, and 16 are obvious over *Waibel* in view of alleged well known prior art under 35 U.S.C. § 103(a).

ARGUMENT

A. GROUND OF REJECTION 1

A.1. Group A of Claims: Claims 1-6, 8-12, 14-18, and 20

The Examiner has rejected claims 1-21 under 35 U.S.C. § 102(e) as being anticipated by *Waibel*. Appellants respectfully urge the Board to reverse this rejection. The Examiner states:

> Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Waihel (US 2003/0164819).
>
> As per claim 1, Waihel teaches, "a method in a portable device for transliterating text", the method comprising:
>
> "generating an image of the text using a camera function in the portable device" (Fig. 2, element 103);
>
> "sending the image with an identification of source language and a target language to a transliteration service using a wireless communications link" (Paragraphs 0030-0032);
>
> "receiving response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language" (Paragraph 0040, particularly -a visual display of a translation sign together with a synthetically generated pronunciation of ,the original sign); and
>
> "presenting the transliteration" (Paragraph 0040).

Final Office Action date January 3, 2007, pp. 2-3.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). Anticipation focuses on whether a claim reads on the product or process a prior art reference discloses, not on what the reference broadly teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983). In this case, each and every feature of the presently claimed invention is not identically shown in the cited reference, arranged as they are in the claims.

Claim 1 is a representative claim of claims 1-6, 8-12, 14-18, and 20 in Group A and recites:

> 1. A method in a portable device for transliterating text, the method comprising:
>
> generating an image of the text using a camera function in the portable device;
>
> sending the image with an identification of a source language and a target language to a transliteration service using a wireless communications link;
>
> receiving a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language; and
>
> presenting the transliteration.

In the present case, each and every step in claim 1 is not shown in the cited reference as believed by the examiner. In particular, *Waibel* fails to teach the steps of sending, receiving, and presenting as recited in claim 1. Here, as in a previous Non-Final Office Action, the Examiner misunderstands the claim term "transliteration" and appears to mistake the term to mean translation. In the response to the previous Non-Final Office Action, as well as in the telephone interview prior to that response, the Examiner's attention was directed to the difference between the then cited prior art which taught translation and the claim language which recited transliteration. Consequently, the then cited prior art was overcome and the present Final Office Action issued, citing *Waibel*.

As shown below, similar to the prior art cited in the previous Non-Final Office Action, *Waibel's* teachings also pertain to translation, and not transliteration in the manner claimed in claim 1. The sending step recites, "sending the image with an identification of a source language and a target language to a transliteration service using a wireless communications link". The Examiner cites the following paragraphs of *Waibel* as teaching the sending step:

> In addition to executing the operating system of the PDA **101**, processor **202** of the current embodiment executes the programming code necessary to distinguish and extract characters from the background, recognize these characters, translate the extracted characters, and return the translation to the user. Processor **202** is responsive to the various input

devices and is operable to drive the output devices of the portable information system **100**. Processor **202** is also operable (among others) to store and retrieve information from memory **203**.

Capture module **204** and segmentation and recognition module **205** contain the programming code necessary for processor **202** to distinguish a character from a background and extract the characters from the background, among others. Capture module **204**, segmentation and recognition module **205**, and translation module **206** operate independent of each other and can be performed either onboard of the PDA as internal software or externally in a client/server arrangement. In one of these alternative embodiments, a single module that combines the functions of the capture module **204**, the segmentation and recognition module **205**, and the translation module **206**, are all performed in on a fully integrated PDA device arrangement, while in another embodiment a picture is captured, and any of the steps, extraction/segmentation, recognition and translation, are performed externally on a server (see for example, the cell-phone embodiment described below). Either of these alternative embodiments remain within the scope of the present invention.

In one embodiment, portable information system **100** functions in the following manner. Interface module **201** receives a video input signal containing a user selected object such as a sign and a background from the digital camera **103** through one of the PDA's **101** input ports (such as a PCI card, PCMCIA card, and USP port, among others). If necessary, the interface module **201** converts the input signal to a form usable by the processor **202** and relays the video input signal to processor **202**. The processor **202** stores the video input signal within memory **203** and executes the programming contained within the capture module **204**, the segmentation and recognition module **205** and the translation module **206**.

Waibel, para. 0030-0032.

In these paragraphs, *Waibel* teaches that a PDA contains processing code to accept an image of characters, extract the characters and translate the extracted characters. The translated characters are then returned to the user of the PDA. For performing the translation, the programming code in the PDA contains a translation module 206. *Waibel* further describes that in an alternative embodiment the translation module may be external to the PDA, such as in a client server environment. However, this section, and the remainder of *Waibel's* disclosure, fails to teach the sending step as recited in claim 1.

Notice that *Waibel* performs a translation, not transl***iter***ation, using a translation component. Translation and transliteration are not the same. Any collegiate English language dictionary provides distinguishing meanings of the two terms. For example, the Merriam-Webster's dictionary provides:

> Transliterate: to represent or spell in the characters of another alphabet.
> Translate: to turn into one's own or another language.

Thus, translation is not transliteration, and by teaching translation, *Waibel* does not teach transliteration as recited in the sending step of claim 1.

As the Board is informed above, the different terms were brought home to the Examiner in more than one way prior to the present Final Office Action. Furthermore, the remainder of claim 1 elaborates on the manner of transliteration as claimed. For example, the receiving step of claim 1 recites, "receiving a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language". As clarified by the receiving step of claim 1, the transliterating service returns a transliteration, which contains "a phonetic pronunciation", that is "used to pronounce the text in the source language" using characters in the target language. A general meaning of "translation" within the scope of *Waibel,* tells a user what something in a source language means, in a second language. This translation according to *Waibel* fails to teach "transliteration" which contains phonetic pronunciation according to claim 1. Nonetheless, the Examiner cites the following section from *Waibel* as teaching the receiving step:

> The segmentation and recognition module **205** works in conjunction with memory **203**. In the current embodiment, memory **203** includes a database with information related to the type of objects that are to be identified and the languages to be translated, among others. For example, the database may contain information related to the syntax and physical layout of signs used by a particular country, along with information related to the language that the sign is written in and related to the user's native language. Information may be output in several ways, e.g. visually, acoustically, or some combination of the two, e.g. a visual display of a translated sign together with a synthetically generated pronunciation of the original sign.

Waibel, para. 0040.

Waibel fails to teach anything that contradicts the above distinction described between the translation of *Waibel* and transliteration of claim 1. In this paragraph, *Waibel* informs that the translated matter may be output in visual form as translated text, and audible form as the pronunciation of the original sign. The Examiner specifically points out the "synthetically generated pronunciation of the original sign" part of the teaching as particularly teaching the receiving step of claim 1. The Examiner's specific emphasis on this teaching in *Waibel* is, however, moot. Even if, *arguendo*, the Examiner is correct in pointing out that *Waibel* teaches synthetically generated pronunciation of the original sign, pronouncing something audibly does not teach transliteration contain[ing] phonetic pronunciation. The former generates an auditory signal, as *Waibel* itself acknowledges in the above paragraph; and the latter writes the phonetic pronunciation. The former is an audio stimulus; the latter is a visual stimulus.

Note that the visual stimulus of transliterated phonetic pronunciation is also distinct from the visual display of the translated sign in *Waibel*. The visual display in *Waibel* contains the translated text, whereas the transliterated phonetic pronunciation can be viewed as a visual guidance to an auditory performance. Thus, neither the audio pronunciation, nor the visual display in *Waibel* teaches the receiving step as recited in claim 1.

Waibel also fails to teach the presenting step of claim 1 by similar reasoning. The presenting step of claim 1 recites, "presenting the transliteration". The Examiner points to paragraph 0040 of *Waibel*, quoted and described above, as teaching the presenting step as well. However, as demonstrated above, *Waibel* as a whole fails to teach transliteration as recited in claim 1, and consequently cannot present the (absent) transliteration in order to teach the presenting step of claim 1.

Therefore, contrary to the Examiner's assertions, *Waibel* fails to teach at least three features of claim 1. Consequently, *Waibel* does not anticipate claims 1-6, 8-12, 14-18, and 20 under 35 U.S.C. § 102(e).

A.2. <u>Group B of Claims: Claims 7, 13, 19, 21</u>

Claim 7 is a representative claim of claims 7, 13, 19, and 21 in Group B and recites:

> 7. A method in a data processing system for transliterating text from a source language to a target language, the method comprising:

receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language;

performing optical character recognition on the image to generate the text;

transliterating the text from the source language to the target language to form transliterated text, wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language; and

sending the transliterated text to the portable device.

In the present case, each and every step in claim 7 is not shown in the *Waibel*. In particular, *Waibel* fails to teach the steps of transliterating and sending as recited in claim 7. The Examiner has rejected claim 7 stating:

> As per claims 7-9, 11-1 5 and 17-21, they are interpreted and thus rejected for the same reasons set forth in the rejection of claims 1, 2, 4-6.

Final Office Action dated January 3, 2007, p. 3.

The reasoning for *Waibel's* failure to teach the transliterating and sending steps of claim 7 is similar to the reasoning identified in the above section of the present Appeal Brief as to claim 1. As described above, *Waibel* fails to teach transliteration. Consequently, without more, *Waibel* fails to teach transliterating, as in the transliterating step of claim 7. The Examiner points to the rejection of claims 1, 2, and 4-6 in rejecting claim 7. In addition to the citations to the various sections of *Waibel* in the rejection of claim 1, the Examiner cited to the following sections and figures in the rejection of claims 2 and 4-6:

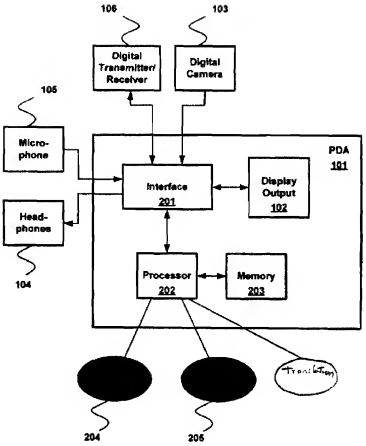

FIG 2

Waibel, Figure 2. (*Reference numerals 204 and 205 are unreadable in the original. In the detailed description, the reference states that 204 refers to a "capture module" and 205 refers to a "segmentation and recognition module".*)

The Examiner particularly points to reference numeral 102 in this figure as teaching "presenting the transliteration on a display [sic] the portable device". Reference numeral 102 is simply a display output according to the cited figure. A display output does not teach display of anything in particular without additional information, lest a general mention of a display unit should anticipate everything displayable. The relevant information displayed on *Waibel's* display output is a translated text as described above with respect to *Waibel* paragraph 0040. A display output, or a display output used to display translated text does not teach transliterating, transliteration, or presentation thereof.

The Examiner cites to paragraph 0031 in rejecting claims 4 and 5. The paragraph has been quoted and described above with respect to claim 1. Paragraph 0031 in *Waibel* fails to teach transliterating, transliteration, or presentation thereof.

The Examiner additionally cites paragraph 0026 in *Waibel* alleging that the paragraph teaches "wireless communications link" according to claim 6. Whether that paragraph teaches the wireless communication link of claim 6 is moot as to the rejection of claim 7 because no corresponding feature is recited in claim 7.

Therefore, neither the rejection of claim 1, nor that of claims 2 and 4-6 cites to any teaching in *Waibel* that corresponds with the transliterating and sending steps of claim 7. *Waibel* as a whole fails to teach all the features of claim 7, and therefore does not anticipate claims 7, 13, 19, and 21 under 35 U.S.C. § 102(e).

B. GROUND OF REJECTION 2

Group C of Claims: Claims 3, 10, and 16

The Examiner has rejected claims 3, 10, and 16 under 35 U.S.C. § 103(a) as being obvious over *Waibel* in view of alleged well known prior art, of which the Examiner takes official notice, (hereinafter, "*official notice*"). Appellants respectfully urge the Board to reverse this rejection. The Examiner states:

> Claims 3, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Waihel as applied to claims 1, 8 and 14 above, and further in view of well-known prior art.
>
> As per claim 3, 10 andl6, Wailhel does not explicitly teach a text speech conversion process. Official Notice is taken on a well-known text to speech conversion process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a text to speech converter in the Wailhel's synthetically generated pronounce process because that provides pronunciation in a conventional way easily.

Final Office Action date January 3, 2007, p. 4.

B.1. The Cited References Do Not Teach all of the Features of Claims 3, 10, and 16

The Examiner has failed to state a *prima facie* obviousness rejection because the cited references used in proposed combination do not teach all of the features of claim 3 as believed by the Examiner.

Claim 3 is representative of dependent claims 3, 10, and 16 in Group C and recites:

> 3. The method of claim 1, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service.

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). All limitations of the claimed invention must be considered when determining patentability. *In re Lowry*, 32 F.3d 1579, 1582, 32 U.S.P.Q.2d 1031, 1034 (Fed. Cir. 1994). In the case at hand, not all of the features of the claimed invention have been considered and the teachings of the references themselves do not suggest the claimed subject matter to a person of ordinary skill in the art.

As described in the above section A.1, *Waibel* fails to anticipate claim 1. Accordingly, without more, *Waibel* also fails to anticipate claim 3 at least by virtue of the dependence of claim 3 on claim 1. Thus, contrary to the Examiner's assertion, *Waibel* does not teach or suggest all features but "the text to speech conversion process" of claim 3. For example, *Waibel* fails to teach or suggest "the text in the transliteration" or the "transliteration service" recited in claim 3 by the reasoning provided above as to claim 1.

Further, the Examiner relies on *official notice* to find a teaching of text-to-speech conversion technology and method. Whether the *official notice* teaches text-to-speech conversion process is moot in view of the fact that *Waibel* fails to teach all the features other than the text-to-speech conversion process feature of claim 3. Therefore, neither *Waibel* alone, nor *Waibel* in combination with *official notice*, teach or suggest all the features of claim 3. Consequently, *Waibel* in view of *official notice* does not make claims 3, 10, and 16 obvious under 35 U.S.C. § 103(a).

B.2. The Examiner Has Not Stated a Motivation to Modify The Reference, and No Motivation to Modify Exists in The Reference

In order to make the features of claim 3 obvious, *Waibel's* teachings would have to be modified to use transliteration instead of translation in *Waibel's* invention. The Examiner has not pointed to anything in *Waibel* that indicates a need, desirability, or incentive to use transliteration instead of translation in *Waibel's* invention.

In fact, no motivation for this modification exists in *Waibel*. *Waibel's* is a translation system, as is evident from the title of the disclosure. Furthermore, *Waibel* points out in the abstract:

> The invention is particularly useful as a portable aid for translating or remembering text messages foreign to the user that are found in visual scenes. A second important use is to provide mobile information and guidance to the mobile user in connection with surrounding objects (such as, identifying landmarks, people, and/or acting as a navigational aid).

Waibel, Abstract.

Obviously, transliterating in the manner recited in claim 3 would not accomplish many of the stated important uses of *Waibel's* invention. For example, *Waibel* contends that translated signs can be used as a navigational aid. A transliterated sign, on the other hand, makes little sense for the purposes of navigation as described in *Waibel* because from the transliteration, the user will be able pronounce the sign but still not know what it means. The translation in *Waibel* provides the meaning, which then has value for navigational purposes. Therefore, *Waibel's* disclosure provides no motivation for replacing translation with transliteration, and for this additional reason, *Waibel* does not make the features of claims 3, 10, and 16 obvious under 35 U.S.C. § 103(a).

C. Conclusion

For the foregoing reasons, *Waibel* fails to anticipate claims 1-21 under 35 U.S.C. § 102(e), and *Waibel* in view of *official notice* fails to make claims 3, 10, and 16 obvious under 35 U.S.C. § 103(a). Therefore, Appellants respectfully urge the Board of Appeals to reverse the rejections of claims 1-21 and direct the Examiner to allow the claims.

/Rakesh Garg/
Rakesh Garg
Reg. No. 57,434
YEE AND ASSOCIATES, P.C.
PO Box 802333
Dallas, TX 75380
(972) 385-8777

CLAIMS APPENDIX

The text of the claims involved in the appeal are:

1. A method in a portable device for transliterating text, the method comprising:

generating an image of the text using a camera function in the portable device;

sending the image with an identification of a source language and a target language to a transliteration service using a wireless communications link;

receiving a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language; and

presenting the transliteration.

2. The method of claim 1, wherein the transliteration containing the phonetic pronunciation of the text in the source language is characters in the target language and wherein the presenting step comprises:

presenting the transliteration on a display in the portable device.

3. The method of claim 1, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service.

4. The method of claim 1, wherein the transliteration service is located on a server on an Internet.

5. The method of claim 1, wherein the portable device is selected from one of a mobile phone, a personal digital assistant, and a table personal computer.

6. The method of claim 1, wherein the wireless communications link has a protocol using at least one of code division multiple access, time division multiple access, Blue Tooth, I.E.E.E. 802.11b, and I.E.E.E. 802.11g.

7. A method in a data processing system for transliterating text from a source language to a target language, the method comprising:

receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language;

performing optical character recognition on the image to generate the text;

transliterating the text from the source language to the target language to form transliterated text, wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language; and

sending the transliterated text to the portable device.

8. A data processing system in a portable device for transliterating text, the data processing system comprising:

generating means for generating an image of the text using a camera function in the portable device;

sending means for sending the image with an identification of a source language and a target language to a transliteration service using a wireless communications link;

receiving means for receiving a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language; and

presenting means for presenting the transliteration.

9. The data processing system of claim 8, wherein the transliteration containing the phonetic pronunciation of the text in the source language is characters in the target language and wherein the presenting means comprises:

means for presenting the transliteration on a display in the portable device.

10. The data processing system of claim 8, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service.

11. The data processing system of claim 8, wherein the translation service is located on a server on an Internet.

12. The data processing system of claim 8, wherein the portable device is selected from one of a mobile phone, a personal digital assistant, and a table personal computer.

13. A data processing system for transliterating text from a source language to a source language, the data processing system comprising:

receiving means for receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language;

performing means for performing optical character recognition on the image to generate the text;

translating means for transliterating the text from the source language to the target language to form transliterated text; and

sending means for sending the transliterated text to the portable device.

14. A computer program product in a computer readable medium in a portable device for transliterating text, the computer program product comprising:

first instructions for generating an image of the text using a camera function in the portable device;

second instructions for sending the image with an identification of a source language and a target language to a transliteration service using a wireless communications link;

third instructions for receiving a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language; and

fourth instructions for presenting the transliteration.

15. The computer program product of claim 14, wherein the transliteration containing the phonetic pronunciation of the text in the source language is characters in the target language and wherein the fourth instructions comprises:

sub-instructions for presenting the translation on a display in the portable device.

16. The computer program product of claim 14, wherein text in the transliteration is converted into speech using a text to speech conversion process by the portable device or by the transliteration service.

17. The computer program product of claim 14, wherein the transliteration service is located on a server on an Internet.

18. The computer program product of claim 14, wherein the portable device is selected from one of a mobile phone, a personal digital assistant, and a table personal computer.

19. A computer program product in a computer readable medium for transliterating text from a source language to a source language, the computer program product comprising:

first instructions for receiving a request from a portable device, wherein the request includes an image of the text, an identification of the source language, and an identification of the target language;

second instructions for performing optical character recognition on the image to generate the text;

third instructions for transliterating the text from the source language to the target language to form translated text, wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language; and

fourth instructions for sending the transliterated text to the portable device.

20. A portable device comprising:

a bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to generate an image of the text using a camera function in the portable device; send the image with an identification of a source language and a target language to a transliteration service using a wireless communications link; receive a response from the transliteration service, wherein the response contains a transliteration of the text in the target language and wherein the transliteration contains a phonetic pronunciation used to pronounce the text in the source language using characters in the target language; and present the transliteration.

21. A data processing system comprising:

a bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions; and

a processing unit connected to the bus system, wherein the processing unit executes the set of instructions to receive a request from a portable device, wherein the request includes an image of

the text, an identification of the source language, and an identification of the target language; perform optical character recognition on the image to generate the text; transliterate the text from a source language to a target language to form transliterated text wherein the transliterated text contains a phonetic pronunciation of the text from the source language using characters in the target language; and send the transliterated text to the portable device.

EVIDENCE APPENDIX

There is no evidence to be presented.

RELATED PROCEEDINGS APPENDIX

There are no related proceedings.